age of the latter is inconclusive as it rests on the fact that they cut Triassic sandstones. On this evidence they might be post-Triassic.

The region comprises a series of folds, beveled to the present surface, and one great overthrust fault. The jointing, folding, faulting, and schistosity are referred to the same epoch of compression.

Four types of ore bodies are noted, namely impregnations in the schists, stringer leads in quartz, parallel to the schistosity, quartz veins cutting the schistosity, and replacement deposits.

The ore minerals are auriferous pyrite, chalcopyrite, galena, and zinc blend. The deposits are referred to magmatic waters, perhaps emanating from a granitic mass a few miles west. The time of deposition is placed after metamorphism. In view of Emmons' recent work in Maine and Tennessee the evidence on this last point needs to be more carefully worked out.

A. D. B.

The Iron Ore Supply of Japan. By KINOSUKE INOUYE. "The Iron Ore Resources of the World." Stockholm, 1910. Pp. 927–69; Plates 4; Figs. 13.

The iron ore deposits of Japan are classified in six groups as follows:

I. Magmatic segregations in granite. Not of economic importance under present conditions.

II. Bedded deposits usually in connection with radiolarian quartzites and slates of Paleozoic and Mesozoic age. The ores carry from 20 to 50 per cent iron with silica up to 40 per cent. They are usually rather high in phosphorus.

III. Contact deposits in limestone near contact with intrusives. These are the most important ores of Japan. The ore is chiefly magnetite with minor amounts of micaceous hematite and limonite. The iron content averages from 55 to 60 per cent with some analyses giving over 69 per cent. The ores are mixed with contact minerals and quartz and in some cases contain pyrite and chalcopyrite.

IV. Veins in various kinds of rocks. Not of great importance under present conditions.

V. Limonite deposits derived from the decomposition and redeposition of pyrite or magnetite deposits or by deposition from ferruginous springs. These are next in importance to class III.

VI. Alluvial deposits of iron sand derived from the decomposition of older rocks.

The amount of ore in sight is estimated at 19,000,000 metric tons;

probable ore, 37,000,000 metric tons, in addition to this amount. Low-grade ore, high in silica but of possible economic importance, 4,000,000 metric tons. A table of about 175 analyses of ores from various locations is added.

A. D. B.

The Iron Ore of Corea. By KINOSUKE INOUYE. "Iron Ore Resources of the World." Stockholm, 1910. Pp. 973–81; Plate 1.

Three types of deposits have been recognized, namely magmatic segregations, bedded deposits, and contact deposits, but little is known regarding the occurrence of the ores. The present output is about 70,000 metric tons per year, mostly limonite, with some hematite and magnetite. In one district a rough calculation gives 4,000,000 metric tons above level ground, but for the rest of Corea data are lacking. The producing mines are briefly described and a number of analyses are inserted. The iron content varies from 29 per cent in one of the contact ores to 70 per cent in one of the magnetite ores.

A. D. B.

Building Stones. By JOHN WATSON. Cambridge, 1911. Pp. 483.

This is a descriptive catalogue of the specimens of British and foreign building stones in the Sedgwick Museum, Cambridge, England. The rocks are grouped according to origin as igneous plutonic, igneous volcanic, metamorphic, and sedimentary. The sedimentary rocks are subdivided according to their geologic age. Under each of these divisions the rocks are taken up by countries and about half of the book is devoted to their occurrence, texture, and uses. The remainder of the book is the catalogue proper, giving the name and location of specimens by number. Brief notes as to color and texture, and in most cases chemical analyses and crushing tests are added.

A. D. B.